

The Effect Of Regional Original Income, General Allocation Funds, Specific Allocation Funds, And Fund For The Results Of The District Capital Expenditure Allocation And North Sumatra Province City, 2010-2019

Ira Safitri¹, Beby Kendida Hasibuan², Amlis Syahputra Silalahi³, Syahyunan⁴

¹Management, Economics and Business, University of North Sumatra, Medan, Indonesia

²Management, Economics and Business, University of North Sumatra, Medan, Indonesia

³Management, Economics and Business, University of North Sumatra, Medan, Indonesia

⁴Management, Economics and Business, University of North Sumatra, Medan, Indonesia

* bebykendida08@gmail.com

ABSTRACT

This study aims to determine the effect of Regional Original Income (PAD), General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sharing Fund (DBH) on the allocation of Capital Expenditures. This research is a causal associative design research and the type of data used is quantitative data. The data used is obtained from the Regional Budget Realization Report which has been published on the official website as well as from the Regional Government Financial Report (LKPD) document submitted to the Supreme Audit Agency (BPK) of North Sumatra Province. The population of this study were all districts / cities in North Sumatra Province consisting of 25 District Governments and 8 City Governments in the period 2010 to 2019. The sample of this study was determined using saturated sampling. The technique used is multiple linear regression analysis of panel data. The results of this study indicate that simultaneously PAD, DAU, DAK, and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. and DBH has a significant effect on the allocation of Capital Expenditures in the Regencies and Cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. and DBH has a significant effect on the allocation of Capital Expenditures in the Regencies and Cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019.

Keywords: Capital Expenditures, Local Own Revenue, General Allocation Funds, Special Allocation Funds, Profit Sharing Funds.

ABSTRACT

This study aims to determine the effect of Regional Own Revenue (PAD), General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sharing Fund (DBH) on the allocation of Capital Expenditures. This research is a causal associative design research and the by using quantitative data. The data were obtained from the APBD Realization Report published on the official website as well as from the Regional Government Financial Report (LKPD) document submitted to the Audit board of North

Sumatra Province. The data were obtained from the APBD Realization Report published on the official website as well as from the Regional Government Financial Report (LKPD) document submitted to the Audit board of North Sumatra Province. The population of this study consists of 25 regency and 8 municipals government in North Sumatra. The sample of this study is determined using saturated sampling. The technique used is multiple linear regression analysis of panel data. The results reveal that simultaneously PAD, DAU, DAK, and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. The technique used is multiple linear regression analysis of panel data. The results reveal that simultaneously PAD, DAU, DAK, and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. The technique used is multiple linear regression analysis of panel data. The results reveal that simultaneously PAD, DAU, DAK, and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019. and DBH have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province. Partially, PAD has a positive and significant effect on the allocation of capital expenditure, DAU has a positive and significant effect on the allocation of capital expenditure, DAK has a positive and significant effect on the allocation of capital expenditure, and DBH has a positive and significant effect on the allocation of capital expenditures in regencies / municipalities of North Sumatra Province the period 2010 to 2019.

Keywords: Capital expenditure, regional original income, general allocation funds, special allocation funds, revenue-sharing funds.

PRELIMINARY

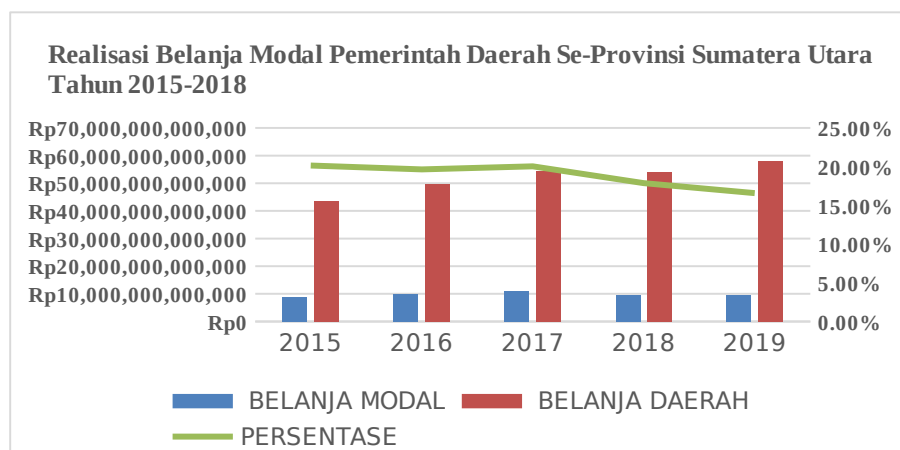
The issuance of Law No. 22 of 1999 (revision of Law Number 9 of 2015) concerning Regional Government and Law No. 25 of 1999 (revision of Law Number 33 of 2004) concerning Financial Balance between Central and Regional Government is the starting point for the implementation of regional autonomy and fiscal decentralization. The existence of decentralization provides broader authority for local governments both in terms of planning and implementation of government activities, which are expected to have an effect on improving the quality of services provided. Regional autonomy and fiscal decentralization have had consequences on the distribution pattern and the relationship of authority and financial relations between the central government and local governments (Mardiasmo, 2018).

One of the strategies to achieve the success of regional autonomy and fiscal decentralization is the need for local government financial management reform, which includes regional revenue management and regional expenditure management. One of the emphasizes in reforming local government financial management, especially regional expenditure management, is to apply the principle of value for money. Some of the benefits of value for money for local governments are increasing the effectiveness and quality of public services, in the sense that the services provided are right on target, and spending allocations that are more oriented to the public interest. The expenditure allocation referred to is the allocation of capital expenditure, as stated by Jemparut & Riduwan (2017) states that the expenditure allocation is more related to the provision of facilities or goods of a public nature, such as the provision of roads, repair of irrigation networks, security and defense, and so on. Therefore, in an effort to improve the quality of public services, local governments are required to allocate funds in the form of a capital expenditure budget in the APBD to increase fixed assets.

The positive impact given to the availability of public infrastructure has made capital expenditure a major concern in regional expenditure issues. This can be seen in the 2015-2019 National Medium-Term Development Plan (RPJMN) which sets targets for the development of regional governance in improving regional fiscal capacity and financial performance, with an average district / city capital expenditure target of 19.87 percent (2014). to 30 percent (2019) and the average provincial capital expenditure from 16.22 percent (2014) to 30 percent (2019). The target percentage of capital expenditure to total regional expenditure is an indicator of the achievement of the quality of regional spending.

It seems that the condition of district / city government in the province of North Sumatra has not yet been maximized in achieving the National Medium Term Development Plan (RPJMN) that has been set. In Figure 1 below shows the amount of capital expenditure realized by the Regional Government in North Sumatra Province during 2015 to 2019. From this information it can be concluded that the Regional Government in North Sumatra Province has not succeeded in achieving the target percentage of capital expenditure that has been set in the RPJMN. The failure to reach this percentage concludes that most of the Regional Governments in North Sumatra Province have a low level of capital expenditure realization.

The following is the realization of capital expenditures that occurred in the Regional Government of North Sumatra Province:



Source: Directorate General of Fiscal Balance (Data processed by researchers, 2020)

Picture 1

Realization of Capital Expenditures and Total Local Government Expenditures of North Sumatra Province

Whereas in Figure 2 below illustrates the annual average of the realized capital expenditure of each district / city government in North Sumatra in the 2015 to 2019 period. Based on the chart below, if the

[illegible]

Figure 2
Average Realization of Regional Government Capital Expenditures in North Sumatra Province

The allocation of capital expenditures to local governments can come from various revenues and financing (Sugiyanta, 2016). Several sources of funds for allocating capital expenditures in the APBD are regional revenue (PAD), General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sharing Fund (DBH).

1. Agency Theory

Agency theory describes the principal and agent relationship which analyzes the contractual arrangement between two or more individuals, groups, or organizations. The principal makes a contract, either implicitly or explicitly with the agent, hoping the agent will act by doing the job as desired by the principal, in this case a delegation of authority occurs (Halim & Syukriy, 2006).

The agency relationship in the local government environment has dual accountability, namely the agency relationship between the legislature (principal) and the executive (agent) and the agency relationship between the legislature (agent) and the public (principal). Regarding the budget, agency theory can be seen in the relationship between the executive and the legislature. In financial management, the law in Indonesia clearly separates the function of the government (executive) and the function of the people's representatives (legislative). Based on this differentiation of functions, the executive conducts planning, implementation and reporting of the budget which is a manifestation of service to the public while the legislature plays an active role in implementing legislation, budgeting and supervision.

The Indonesian state has a regional budget document called the APBD, which the preparation process involves two parties, namely the executive and the legislature through a team or budget committee. From an agency perspective, this is a form of contract that becomes a tool for the legislature to oversee budget execution by the executive (Suwanda, Junjuna, Affandi, & Rusliati, 2019).

2. Regional Financial Management

Broadly speaking, regional financial management can be divided into two parts, namely regional revenue management and regional expenditure management. The evaluation of regional financial management and regional development financing has very broad implications. These two components will greatly determine the success of a regional government in implementing regional autonomy. The most important manifestation of regional financial management is regional budget management.

3. Capital Expenditure

Based on Government Regulation (PP) No. 71 of 2010, capital expenditures are regional government expenditures whose benefits exceed 1 (one) fiscal year and will increase regional assets or assets and subsequently add routine expenditures such as maintenance costs in the general administrative expenditure group. Based on the Regulation of the Minister of Finance of the Republic of Indonesia Number 91 / PMK / 05/2007, capital expenditure is a budget expenditure used in order to acquire and add to fixed assets or other assets in order to provide benefits for more than one period of accounting for expenses that exceed the asset capitalization deadline or other assets determined by the government. The fixed assets are used for the daily operations of a work unit, not for sale.

4. Regional Original Income (PAD)

Based on the provisions of the applicable laws, as stipulated in article 1 point 18 of Law Number 33 of 2004 concerning Financial Balance between the Central Government and Regional Governments, it is determined that Regional Original Revenue is revenue obtained by the region which is collected based on regional regulations in accordance with statutory regulations. -invitation. In accordance with the provisions of Law Number 33 of 2004 concerning Financial Balance between the Central Government and Regional Government Article 6, namely Regional Original Income can be obtained through sources of funds obtained from Regional Taxes, Regional Levies, Results of separated regional wealth management. , and other legitimate PAD.

5. General Allocation Fund (DAU)

According to the Ministry of Finance of the Republic of Indonesia, the Directorate General of Fiscal Balance, the General Allocation Fund (DAU) is one of the transfers of Central Government funds to Regional Governments originating from APBN revenues, which are allocated with the aim of equitable distribution of financial capacity between regions to fund regional needs in the context of implementing decentralization. DAU is a Block Grant, which means that its use is submitted to the

regions in accordance with regional priorities and needs for improving services to the community in the context of implementing regional autonomy.

6. Special Allocation Fund (DAK)

According to the Ministry of Finance of the Republic of Indonesia, Directorate General of Fiscal Balance, Special Allocation Funds (DAK) are funds sourced from APBN revenues allocated to certain regions with the aim of helping to fund special activities that are regional affairs and in accordance with national priorities. The amount of DAK is determined annually in the APBN. The use of DAK is directed towards investment activities in development, procurement, improvement, and improvement of physical facilities and infrastructure for public services with a long economic life, with the use of DAK for these activities it is hoped that it can improve public services that are realized in capital expenditures (Husniyah, 2019).

7. Profit Sharing Fund (DBH)

According to the Ministry of Finance of the Republic of Indonesia, Directorate General of Fiscal Balance, profit sharing funds are funds sourced from APBN revenues allocated to regions based on a certain percentage to finance regional needs in the context of implementing decentralization. The objective of DBH is to improve the vertical balance between the center and the regions by taking into account the potential of producing regions.

8. conceptual framework

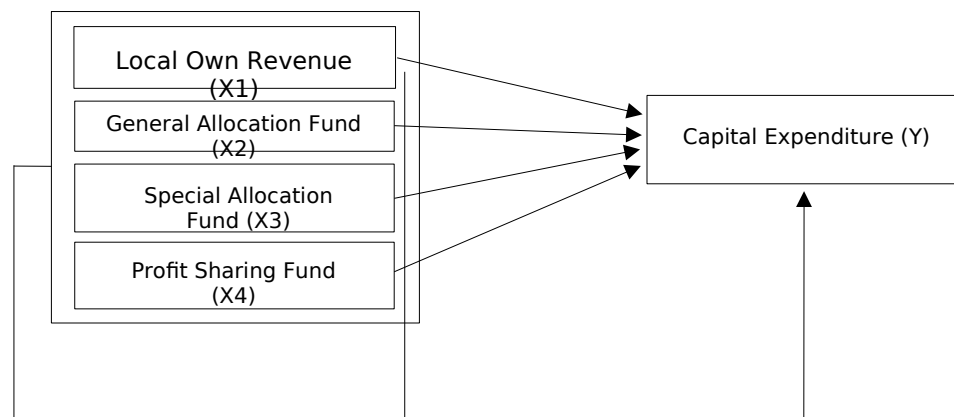


Figure 3
conceptual
framework

RESEARCH METHODS

This type of research used by researchers in this study is a causal associative design. According to Cooper and Emory (1996) in Hasudungan Pohan (2018), the causal associative design is a research design to see

a cause-and-effect correlation between variables. This study aims to analyze the effect of the independent variable on the dependent variable. Local Own Revenue, General Allocation Fund, Special Allocation Fund, and Profit Sharing Fund are independent variables (X) and Capital Expenditures are the dependent variable (Y).

This research was conducted at District / City Governments in North Sumatra Province, totaling 33 districts / cities. The data used are annual data from reports on the realization of the regional revenue and expenditure budget (APBD) as well as the results of the examination of district / municipal government financial reports (LKPD) in North Sumatra Province. This study took a sample of the 2010-2019 period.

The operational limitations in this study are as follows:

1. The variables used in the study consisted of 2 (two) parts, namely:
 - a. The dependent variable (dependent variable), namely Capital Expenditures.
 - b. Independent variables, namely Regional Original Income, General Allocation Funds, Special Allocation Funds, Profit Sharing Funds.
2. The object of this research is the Regency / City Government of North Sumatra Province which has a Regional Budget Realization Report for 2010-2019.

The population in this study were all districts / cities in the province of North Sumatra, which consisted of 25 district governments and eight municipalities in the period 2010-2019. In this study, the method used in determining the sampling is Saturated Sampling (saturated sample). The sample used in this study were all members of the population, namely all districts / cities in North Sumatra Province consisting of 25 district governments and 8 municipalities.

The data used in this study are secondary data. The data source is from the 2010-2019 Regional Budget Realization Report (APBD) document obtained through the official website of the Director General of Fiscal Balance, namely www.djpk.kemenkeu.go.id and from the Regional Government Financial Report (LKPD) document submitted to the Agency. North Sumatra Province Financial Audit (BPK) through the North Sumatra E-PPID service, namely sumut-ppid.bpk.go.id. The nature of this data is pooling data (Data Panel) or combined model, which is a combination of time-series data and cross section data. The data collection method was carried out by conducting documentation studies and literature studies.

The data analysis technique used in this study was to analyze the panel data model. The calculation uses statistical methods carried out through Microsoft Office Excel 2019 and EvIEWS 10. The methods used are as follows:

- Descriptive Analysis Method
Descriptive analysis is a method of analysis carried out by collecting the necessary data, then the data is classified, analyzed, and interpreted objectively so that a clear picture of the topic or problem under study is obtained.
- Panel Data Multiple Linear Regression Analysis
 1. Panel Data Regression

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_{it}$$

Information:

Y_{it}	= Capital Expenditure
β_0	= Constant
$\beta_1, \beta_2, \beta_3, \beta_4$	= Independent variable regression coefficient
X_1	= Regional Original Income
X_2	= General Allocation Fund
X_3	= Special Allocation Fund

X4	= Profit Sharing Fund
ϵ	= Error of term
i	= Regency / City Government
t	= Time

2. Panel Data Regression Model Selection

To estimate model parameters with panel data, several approaches are offered, namely (Ghozali & Ratmono, 2013):

- Common Effect Model (CEM) or Pooled Least Square (PLS)
- Fixed Effects Model (FEM)
- Random Effect Model (REM)

The steps for selecting a panel data model are briefly as follows:

- 1) Chow test (used to choose between common effect or fixed effect models).
- 2) Hausman test (used to choose between fixed effect or random effect models).
- 3) Lagrange Multiplier test (if there is heteroscedasticity between individual groups).

- Classic assumption test

The classical assumption test is carried out as follows:

1. Normality test
2. Multicollinearity Test
3. Autocorrelation Test
4. Heteroscedasticity Test

- Determination Coefficient Test (R²)
- Hypothesis testing
- Simultaneous Significance Test (F-Test)
- Partial Significance Test (t-test)

RESEARCH RESULT

• Descriptive Statistical Analysis

Descriptive statistical analysis provides an overview of the phenomena or characteristics of the data. The results of data processing in the form of descriptive statistics will display the characteristics of the sample used in this study including the number of samples (N), the sample mean (mean), minimum and maximum values, and standard deviation for each research variable. The description in this study consists of variables of regional revenue, general allocation funds, special allocation funds, and profit-sharing funds towards the allocation of capital expenditures which are presented in Table 1.

Table 1
Descriptive Statistics of Research Variables

	CAPITAL EXPENDITURE (Y)	PAD (X1)	DAU (X2)	DAK (X3)	DBH (X4)
Mean	210.4906	108.9480	551.4165	107.1714	40.10180
Median	183,7663	50.14355	489.1782	71.17287	26.72652

Maximum	997.4760	1829,666	1660,239	459.5102	374.0266
Minimum	0.000000	1.057430	0.251729	0.000000	0.000000
Std. Dev.	144,3185	248.2331	286,7188	88.30195	45,12530
Observations	330	330	330	330	330

The following is a descriptive analysis obtained from Table 1:

1. The Capital Expenditure variable (Y) has a minimum value of 0.000000 which occurs in the City of Padang Sidempuan (2011) and Central Tapanuli Regency (2010) with a total realization value of IDR 0. The maximum value of capital expenditure is 997.4760 which occurs in the City of Medan (2017).) with a total realized value of Rp. 997,475,991,902. The average value of capital expenditure is 210.4906 with a standard deviation of 144.3185.
2. The Regional Original Income variable (X1) has a minimum value of 1.057430 which occurs in the West Nias Regency (2010) with a total realized value of IDR 1,057,429,832. The maximum value of Regional Original Income is 1829,666 which occurs in the City of Medan (2019) with a total realized value of IDR 1,829,665,882,248. The average value of local original income is 108.9480 with a standard deviation of 248.2331.
3. The General Allocation Fund (X2) variable has a minimum value of 0.251729 which occurs in the Kota Gunungsitoli area (2011) with a total realization value of IDR 251,728,688. ScoreThe maximum amount of the General Allocation Fund is 1660,239 which occurs in the Medan City area (2019) with a total realized value of IDR 1,660,238,913,000. The average value of the General Allocation Fund is 551.4165 with a standard deviation of 286.7188.
4. The Special Allocation Fund (X3) variable has a minimum value of 0.000000 which occurs in the area of Medan City (2015) and West Nias Regency (2015) with a total realization value of IDR 0. The maximum value of the Special Allocation Fund is 459.5102 which occurs in the Deli Serdang Regency area. (2017) with a total realized value of IDR 459,510,223,829. The average value of the Special Allocation Fund is 107.1714 with a standard deviation of 88.30195.
5. The Profit Sharing Fund (X4) variable has a minimum value of 0.000000 which occurs in the Kota Tebing Tinggi area (2016) and West Nias Regency (2015) with a total realization value of IDR 0. The maximum value of the Profit Sharing Fund is 374.0266 which occurs in the Medan City area. (2010) with a total realized value of IDR 374,026,589,767. The average value of the Profit Sharing Fund is 40,10180 with a standard deviation of 45,12530.

Research Result Report

• Panel Data Regression Analysis Model

The following is a Common Effect Model (CEM) table which can be seen in Table 2:

Table 2
Common Effect Model

Dependent Variable: BELANJA_MODAL__Y_
Method: Least Squares Panel
Date: 03/03/21 Time: 22:20
Sample: 2010 2019
Periods included: 10
Cross-sections included: 33
Total panel (balanced) observations: 330

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAD__X1_	0.310717	0.019096	16.27109	0.0000

DAU__X2_	0.147773	0.021504	6.871821	0.0000
DAK__X3_	0.257055	0.047636	5.396254	0.0000
DBH__X4_	0.294528	0.099343	2.964774	0.0033
C	55,79746	7,959153	7.010477	0.0000
<hr/>				
R-squared	0.852382	Mean dependent var	210.4906	
Adjusted R-squared	0.850565	SD dependent var	144,3185	
SE of regression	55,78898	Akaike info criterion	10.89607	
Sum squared resid	1011533.	Schwarz criterion	10.95363	
Log likelihood	-1792,851	Hannan-Quinn criter.	10.91903	
F-statistic	469,1557	Durbin-Watson stat	1.161825	
Prob (F-statistic)	0.000000			

The following is a Fixed Effect Model (FEM) table which can be seen in Table 3:

Table 3
Fixed Effect Model

Dependent Variable: BELANJA_MODAL__Y_
Method: Least Squares Panel
Date: 03/03/21 Time: 22:21
Sample: 2010 2019
Periods included: 10
Cross-sections included: 33
Total panel (balanced) observations: 330

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAD__X1_	0.295947	0.046826	6.320183	0.0000
DAU__X2_	0.325962	0.035246	9.248128	0.0000
DAK__X3_	0.055987	0.052395	1.068562	0.2861
DBH__X4_	0.300171	0.148226	2.025085	0.0438
C	-19.52976	16,73566	-1.166955	0.2442
<hr/>				
Effects Specification				
<hr/>				
Cross-section fixed (dummy variables)				
<hr/>				
R-squared	0.902450	Mean dependent var	210.4906	
Adjusted R-squared	0.890464	SD dependent var	144,3185	
SE of regression	47,76390	Akaike info criterion	10.67574	
Sum squared resid	668447.4	Schwarz criterion	11.10170	
Log likelihood	-1724,497	Hannan-Quinn criter.	10,84565	
F-statistic	75.29407	Durbin-Watson stat	1.801063	
Prob (F-statistic)	0.000000			

The following is a Random Effect Model (REM) table which can be seen in Table 4:

Table 4
Random Effect Model

Dependent Variable: BELANJA_MODAL__Y_
Method: Panel EGLS (Cross-section random effects)
Date: 03/03/21 Time: 22:26
Sample: 2010 2019
Periods included: 10

Cross-sections included: 33
Total panel (balanced) observations: 330
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAD__X1_	0.296810	0.023722	12,51199	0.0000
DAU__X2_	0.205652	0.023941	8.589863	0.0000
DAK__X3_	0.188225	0.043125	4.364685	0.0000
DBH__X4_	0.142205	0.099097	1.435003	0.1522
C	38.88101	10.13002	3.838195	0.0001
Effects Specification				
			SD	Rho
Random cross-section			20,55925	0.1563
Idiosyncratic random			47,76390	0.8437
Weighted Statistics				
R-squared	0.777558	Mean dependent var		124,6239
Adjusted R-squared	0.774820	SD dependent var		105,7353
SE of regression	50.17473	Sum squared resid		818188.7
F-statistic	284.0130	Durbin-Watson stat		1.423518
Prob (F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.848776	Mean dependent var		210.4906
Sum squared resid	1036241.	Durbin-Watson stat		1.123972

- **Panel Data Regression Analysis Model Selection**

The following is a Chow Test table which can be seen in Table 5:

Table 5
Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Fixed effects cross-section test

Effects Test	Statistics	df	Prob.
Cross-section F	4,699518	(32,293)	0.0000
Chi-square cross-section	136,707408	32	0.0000

The following is a table of the Hausman Test which can be seen in Table 6:

Table 6
Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Cross-section random effects test

Test Summary	Chi-Sq.	Chi-Sq. df	Prob.
--------------	---------	------------	-------

Statistics			
Random cross-section	37.635976	4	0.0000

- **FEM EGLS Panel Data Regression Model**

The FEM EGLS panel data regression model used can be seen in Table 7:

Table 7
FEM EGLS Panel Data Regression Model

Dependent Variable: BELANJA_MODAL__Y_

Method: Panel EGLS (Cross-section weights)

Date: 03/03/21 Time: 22:27

Sample: 2010 2019

Periods included: 10

Cross-sections included: 33

Total panel (balanced) observations: 330

Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAD__X1_	0.291294	0.060162	4.841854	0.0000
DAU__X2_	0.320797	0.029898	10.72969	0.0000
DAK__X3_	0.106738	0.047073	2.267496	0.0241
DBH__X4_	0.385702	0.157314	2.451806	0.0148
C	-25.04348	14.71691	-1.701681	0.0899
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.864485	Mean dependent var	243.1085	
Adjusted R-squared	0.847835	SD dependent var	114.9845	
SE of regression	47.57396	Sum squared resid	663141.4	
F-statistic	51.91999	Durbin-Watson stat	1.821763	
Prob (F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.901748	Mean dependent var	210.4906	
Sum squared resid	673254.3	Durbin-Watson stat	1.787549	

Based on the table above, it can be seen that the panel data regression equation is used as follows:

$$Y = -25.04348 + 0.291294X1 + 0.320797X2 + 0.106738X3 + 0.385702X4$$

From this equation it can be explained as follows:

1. Constant (β_0) = -25.04348. This shows a constant level, if the variables PAD (X1), DAU (X2), DAK (X3), and DBH (X4) are 0, then Capital Expenditure (Y) is -25.04348, assuming other variables are constant.
2. The PAD coefficient (β_1) = 0.291294 > 0. This shows that the PAD variable (X1) has a positive effect on capital expenditure. If the PAD variable is increased, then capital expenditure will increase with the assumption that other variables are constant, and vice versa.

3. The DAU coefficient (β_2) = 0.320797 > 0. This shows that the DAU variable (X2) has a positive effect on capital expenditure. If the DAU variable is increased, then the capital expenditure will increase with the assumption that other variables are constant, and vice versa.

4. The DAK coefficient (β_2) = 0.106738 > 0. This indicates that the DAK variable (X3) has a positive effect on capital expenditure. If the DAK variable is increased, then capital expenditure will increase with the assumption that other variables are constant, and vice versa.

5. DBH coefficient (β_2) = 0.106738 > 0. This shows that the DBH variable (X4) has a positive effect on capital expenditure. If the DBH variable is increased, then the capital expenditure will increase with the assumption that other variables are fixed, and vice versa.

- **Classic assumption test**

Based on the results of the panel data regression analysis model selection as described above, the selected model is the Fixed Effect Model (FEM). Therefore, it is still necessary to test the classical assumptions again. To avoid other classical assumption tests, the GLS / FGLS estimation method regression equation is used. Thus, as stated by Gujarati & Porter (2009), the estimation method used is GLS / FGLS, so the classical assumptions that must be met are normality and non-multicollinearity. This is because the GLS / FGLS estimation method has accommodated the problems of heteroscedasticity and autocorrelation. Following are the results of the normality test shown in Figure 4:

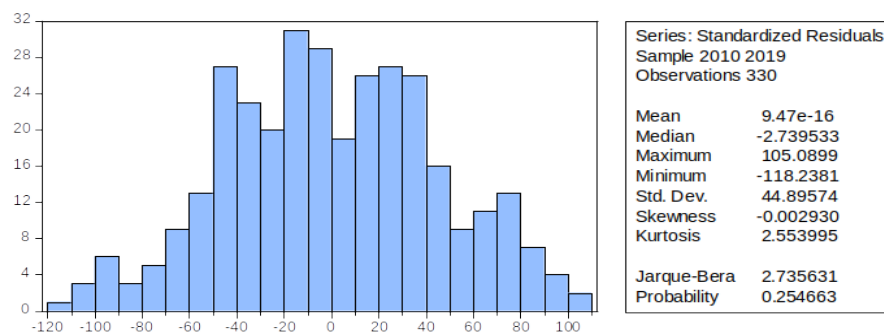


Figure 4.1
Jarque-Bera Normality Test Results

- **Determination Coefficient Test (R2)**

The results of the coefficient of determination (R2) can be seen in Table 8. Based on Table 8, it can be seen that the Adjusted R-square value is 0.847835, which means 84.7835 percent of the variation in the Capital Expenditure variable can be explained by the Regional Original Income (PAD) variable, the General Allocation Fund (DAU), Special Allocation Fund (DAK), and Profit Sharing Fund (DBH). While the remaining 15.2165 percent can be explained by other factors not included in this study. The results of the Adjusted R-squared test are presented in Table 8 as follows:

Table 8
Determination Test Results (R2), F Test, and T Test

Dependent Variable: BELANJA_MODAL_Y_
Method: Panel EGLS (Cross-section weights)
Date: 03/03/21 Time: 22:27
Sample: 2010 2019
Periods included: 10
Cross-sections included: 33

Total panel (balanced) observations: 330
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PAD__X1_	0.291294	0.060162	4.841854	0.0000
DAU__X2_	0.320797	0.029898	10,72969	0.0000
DAK__X3_	0.106738	0.047073	2.267496	0.0241
DBH__X4_	0.385702	0.157314	2.451806	0.0148
C	-25.04348	14.71691	-1.701681	0.0899
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.864485	Mean dependent var	243,1085	
Adjusted R-squared	0.847835	SD dependent var	114.9845	
SE of regression	47.57396	Sum squared resid	663141.4	
F-statistic	51.91999	Durbin-Watson stat	1.821763	
Prob (F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.901748	Mean dependent var	210.4906	
Sum squared resid	673254.3	Durbin-Watson stat	1.787549	

- **Simultaneous Significance Test (F-Test)**

In this study, it is known that the number of samples (n) is 330 and the number of parameters (k) is 5, so that it is obtained that $df1 = k-1 = 5-1 = 4$; $df2 = nk = 330-5 = 325$, then at $\alpha = 0.05$ we get $F_{table} = 2.399432062$. Based on Table 8, it is known that the value of $F_{count} (51.91999) > F_{table} (2.39943)$ and the Prob value (F-statistic) is $0.000000 < 0.05$. So it can be concluded that according to the test results obtained simultaneously PAD (X1), DAU (X2), DAK (X3), and DBH (X4) have a significant effect on the allocation of capital expenditures in the districts and cities of North Sumatra Province.

- **Partial Significance Test (t-test)**

The value with $df = nk$ is $330-5 = 325$, so the value at the 0.05 significance level on the t table is 1.967290077. The results of the partial test (t test) can be seen in Table 8. Based on Table 8, the results of the partial significance test can be concluded, namely:

1. It is known that the coefficient value of the independent variable of local revenue is 0.291294, which is positive with $t_{count} (4.841854) > t_{table} (1.967290077)$. This value can be interpreted that the local revenue variable has a positive effect on capital expenditure. The probability value of the local revenue variable is $(0.0000) < \alpha (0.05)$. If PAD increases by one percent, then capital expenditure will increase significantly by 0.291294 percent and vice versa. So the local revenue variable has a positive and significant effect on capital expenditure.
2. It is known that the coefficient value of the general allocation fund variable is 0.320797, which is positive with $t_{count} (10.72969) > t_{table} (1.967290077)$. This value can be interpreted that the general allocation fund variable has a positive effect on capital expenditure. The probability value of the general allocation fund variable is $(0.0000) < \alpha (0.05)$. If the DAU increases by one percent, then the capital expenditure will increase significantly by 0.320797

percent and vice versa. So the general allocation fund variable has a positive and significant effect on capital expenditure.

3. It is known that the coefficient value of the special allocation fund variable is 0.106738, which is positive with $t_{count} (2.267496) > t_{table} (1.967290077)$. This value can be interpreted that the special allocation fund variable has a positive effect on capital expenditure. The probability value of the special allocation fund variable is $(0.0241) < \alpha (0.05)$. If DAK increases by one percent, then capital expenditure will increase significantly by 0.106738 percent and vice versa. Then the special allocation fund variable has a positive and significant effect on capital expenditure.

4. It is known that the coefficient value of the profit sharing variable is 0.385702, which is positive with $t_{count} (2.451806) > t_{table} (1.967290077)$. This value can be interpreted that the profit sharing variable has a positive effect on capital expenditure. The probability value of the profit sharing variable is $(0.0148) < \alpha (0.05)$. If DBH increases by one percent, then capital expenditure will increase significantly by 0.385702 percent and vice versa. So the profit sharing variable has a positive and significant effect on capital expenditure.

DISCUSSION

• The Effect of Local Own Revenue on the Allocation of Capital Expenditures

The result of the partial test calculation shows that the coefficient value of the local revenue variable is 0.291294 with a significance level of 0.0000. The significance value is less than 0.05, so it can be concluded that local revenue has a positive and significant effect on the allocation of capital expenditures. This is in accordance with the initial hypothesis of the study.

PAD is revenue obtained from financing sources for the capital expenditure budget. PAD is obtained from community contributions such as taxes, regional levies, proceeds from regionally owned companies, and proceeds from the management of regional assets. The responsibility of local governments to the community to provide good public services to the community can be realized through the capital expenditure budget. This explains that the higher the PAD is generated, the more it is possible for these regions to be able to fulfill their own spending needs without having to expect from the central government, which means that local governments are able to be independent of their regional financial management which is transparent and accountable.

The results of this study are supported by research by Susanti & Fahlevi (2016) which states that Regional Original Income (PAD) has a positive effect on capital expenditure. The better the PAD of a region, the greater the allocation of capital expenditures (Ardhani, 2011). The greater the local revenue received, the greater the authority of the regional government in implementing the autonomy policy (Husniyah, 2019). The results of this study are not in line with Wandira's (2013) research which found that local revenue (PAD) does not have a significant effect on capital expenditure.

• General Allocation Funds Against the Allocation of Capital Expenditures

The results of the partial test calculation obtained the coefficient value of the general allocation fund variable of 0.320797 with a significance level of 0.0000. The significance value is less than 0.05, so it can be concluded that the general allocation funds have a positive and significant effect on the allocation of capital expenditures. This is in accordance with the initial hypothesis of the study.

The autonomous regional government has the authority to regulate and manage the interests of the local community with the aspirations of the community in accordance with Law No. 32 of 2004. This is because the general allocation funds, one of which is a transfer fund provided by the central government to regional governments, aim to equalize regional financial capacity and these funds are used to finance regional needs in the context of implementing decentralization.

This also shows that the general allocation funds are still higher than the original regional revenue given to local governments in each district / city. Seeing the influence of the general allocation funds being given, the regional government should strive to increase the elements in the general allocation funds so that the general allocation funds can be allocated according to their needs. The results of this study are supported by research by Susanti & Fahlevi (2016) which states that the general allocation fund (DAU) has a positive effect on capital expenditure. The results of this study are not in line with the research of Syukri and Hinaya (2019) who found that the general allocation fund (DAU) does not have a significant effect on capital expenditure.

- **Special Allocation Fund for the Allocation of Capital Expenditures**

The results of the partial test calculation obtained the coefficient value of the special allocation fund variable of 0.106738 with a significance level of 0.0241. The significance value is less than 0.05, so it can be concluded that the general allocation funds have a positive and significant effect on the allocation of capital expenditures. This is in accordance with the initial hypothesis of the study. These results also indicate that the special allocation funds still have a role in the allocation of capital expenditures. The allocation of special allocation funds can reduce the cost burden of special activities that must be borne by local governments. By directing the use of the special allocation funds, it is hoped that it can improve public services that are realized in capital expenditures.

DAK is used specifically to finance investment in the procurement, improvement or repair of infrastructure and physical facilities with a long economic life. DAK has a significant positive effect on the allocation of the capital expenditure budget, which indicates that DAK tends to increase fixed assets owned by the government in order to improve public services.

The results of this study are supported by research by Hasudungan Pohan (2018) which states that special funds (DAK) have a positive effect on capital expenditure. The results of this study are not in line with the research of Muhammad, Hinaya (2019) who found that the special allocation funds (DAK) do not have a significant effect on capital expenditure.

- **Profit Sharing Funds Against the Allocation of Capital Expenditures**

The results of the partial test calculation obtained the coefficient value of the profit sharing variable of 0.385702 with a significance level of 0.0148. The significance value is less than 0.05, so it can be concluded that profit sharing has a positive and significant effect on the allocation of capital expenditures. This is in accordance with the initial hypothesis of the study. DBH is a potential source of regional revenue and is one of the basic assets of regional governments in obtaining development funds and meeting regional expenditures that do not come from PAD other than DAU and DAK. The revenue sharing pattern is carried out with a certain percentage based on the producing region.

The results of this study are supported by research by Prasetya (2017) which states that revenue sharing (DBH) has a positive effect on capital expenditure. The results of this study are not in line with the research of Hasudungan Pohan (2018) which found that profit sharing funds (DBH) do not have a significant effect on capital expenditure.

CONCLUSION

From the results of testing the Fixed Effect model, the researcher draws the following conclusions:

1. The PAD variable partially has a positive and significant effect on capital expenditures in the Regency / City of North Sumatra Province in 2010-2019.
2. The DAU variable partially has a positive and significant effect on Capital Expenditures in the Regency / City of North Sumatra Province in 2010-2019.

3. The DAK variable partially has a positive and significant effect on capital expenditures in regencies / municipalities of North Sumatra Province in 2010-2019.
4. The DBH variable partially partially has a positive and significant effect on capital expenditures in the Regency / City of North Sumatra Province in 2010-2019.
5. The variables PAD, DAU, DAK, and DBH simultaneously have a positive and significant effect on capital expenditures in districts / cities of North Sumatra Province in 2010-2019.

Based on the research results, the suggestions that can be given are as follows:

1. For Researchers It is further suggested to add other independent variables that affect capital expenditure so that we can find out more about what factors are significant in terms of influencing capital spending.
2. Since this research was only conducted in regencies / cities in North Sumatra, it is hoped that further research can expand the research subject, not only at the provincial level, but at the level throughout Indonesia.
3. For District / City Governments in North Sumatra to be able to improve their performance and not only focus on increasing their PAD. Local governments should be able to increase investment flows to their regions by providing incentives for investors to invest in the regions, such as by providing security in investing. If investment increases, it will increase economic growth. Local governments should also strengthen their financial planning and oversight capacities by improving the quality of the sector's resources and a good and quality system. The level of financial leakage at the regional level is presumed to have increased rapidly in line with the era of regional autonomy which gave regions the authority to manage their own finances.
4. Activating a culture of orderly budgets so that all kinds of activities related to regional finances can be accounted for and are in accordance with predetermined development plans and priorities. Authorities are required to have good financial management capabilities from the local government. With good financial management, it is hoped that it will be able to create a conducive economic climate for the level of regional development.
5. In an effort to increase the public's contribution to regional revenues, the allocation and proportion of the budget for capital expenditures should be further increased. Therefore, the Regional Government as the authority for budget users and executors can allocate funds in the form of a capital expenditure budget in the APBD by adding fixed assets and reducing unproductive routine expenditures. With the availability of good infrastructure, it is hoped that it can create efficiency and effectiveness in various sectors, so that the productivity of the community will be higher. The allocation of this capital expenditure budget is based on regional needs for facilities and infrastructure, both for the smooth implementation of government tasks and for public facilities.
6. Each District and City Government should optimize the potential for regional revenues, especially in the form of Regional Original Revenue so that they do not depend too much on the Central Government.

THANK-YOU NOTE

On this occasion, the researcher would like to express his deep gratitude to both parents, Jazaakumaallaahu khairan to his beloved father EFIT and beloved mother YUSLIANI who have raised, educated, and provided support, and prayers that are not ceaseless to researchers with all outside powers. unrequited ordinary. During the process of compiling this thesis, the researcher realized that he received a lot of guidance, assistance, support, and prayers from various parties. For this reason, the researchers would like to thank profusely to:

1. Mr Prof. Dr. Ramli, SE, MS, as Dean of the Faculty of Economics and Business, University of North Sumatra.
2. Mr Dr. Amlys Syahputra Silalahi, SE, M.Si, and Mr. Doli Muhammad Ja'far Dalimunthe, SE, M.Si, as Chair and Secretary of the Management Study Program, Faculty of Economics and Business, University of North Sumatra.
3. Mrs. Beby Kendida Hasibuan, SE., M.Sc., as the Advisor who has spent a lot of time providing guidance, direction and suggestions in writing this journal.
4. Mr Dr. Amlys Syahputra Silalahi, SE, M.Si, as the first examiner and Mr. Dr. Drs. Syahyunan, M.Sc., as the Second Examiner Lecturer who has provided suggestions and input for the perfection of this journal.
5. To the Lecturers of the Undergraduate Management Study Program, Faculty of Economics and Business, University of North Sumatra who have educated and provided their knowledge to researchers while attending lectures and staff and employees (Ms. Afriani Sarah and Ms. Clarisa Felicia) who have helped during the journal writing process.
6. To brothers / sisters, brothers (Nurul Atika) and brother (Reza Hidayat), researchers who faithfully pray for and provide support and encouragement in the preparation of this journal.

REFERENCE

- Ardhani, P. 2011. The Influence of Economic Growth, Local Own Revenue, General Allocation Funds, and Special Allocation Funds on the Allocation of Capital Expenditure Budget (Studies in District / City Governments in Central Java) 2007-2009. Thesis.
- Cooper, DR, & Emory, CW 1996. Business Research Methods. Jakarta: Erlangga.
- Ghozali, I., & Ratmono, D. 2013. Multivariate and Econometric Analysis. Semarang: Undip.
- Gujarati, DN, & Porter, D. 2012. Basics of Econometrics (Book 2, 5th ed. Edition). (Mangunsong, Trans.) Jakarta: Salemba Empat.
- Halim, A., & Syukriy, A. 2006. Agency relations and problems in local government (a budget and accounting research opportunity). Journal of Government Accounting, 2 No.2, 53-64.
- Hasudungan Pohan, AL 2018. The Effect of Economic Growth, Regional Original Income, General Allocation Funds, Special Allocation Funds and Profit Sharing Funds on the Allocation of District / City Capital Expenditure Budget in Nanggroe Aceh Darussalam Province. USU's Thesis.
- Husniyah, G. 2019. The Effect of Local Revenue, General Allocation Funds, Special Allocation Funds, Profit Sharing Funds on Capital Expenditures in Regencies / Cities in West Java Province for the 2012-2016 period. USU Undergraduate Thesis, 3.
- Jemparut, MS, & Riduwan, A. 2017, September. The Effect of Local Own Income and General Allocation Funds on Capital Expenditures Journal of Accounting Science and Research, 06.
- Ministry of Finance of the Republic of Indonesia Directorate General of Fiscal Balance. (nd). Special Allocation Fund. Retrieved from www.djpk.depkeu.go.id
- Ministry of Finance of the Republic of Indonesia Directorate General of Fiscal Balance. (nd). General Allocation Fund. Retrieved from www.djpk.depkeu.go.id

- Ministry of Finance of the Republic of Indonesia Directorate General of Fiscal Balance. (nd). Profit Sharing Fund. Retrieved from <http://www.djpk.kemenkeu.go.id/>
- Ministry of Finance of the Republic of Indonesia Directorate General of Fiscal Balance. (nd). DBH Principles. Retrieved from <http://www.djpk.kemenkeu.go.id/>
- Mardiasmo. 2018. *Autonomy & Regional Financial Management* (Latest ed.). (Mardiasmo, Ed.) Yogyakarta: Andi Yogyakarta.
- Minister of Finance of the Republic of Indonesia. 2007. Regulation of the Minister of Finance Number 91 / PMK / 05/2007. Retrieved from Chart of Accounts Standard: <https://jdih.kemenkeu.go.id/>
- Government Regulation (PP) No. 71 of 2010. 2010, October 22. Government Regulation (PP) on Government Accounting Standards. Retrieved from <https://peraturan.bpk.go.id/>
- Prasetya, I. 2017. The Influence of Local Own Revenue, General Allocation Fund, Special Allocation Fund, Profit Sharing Fund and Employee Expenditure on Capital Expenditure Budget Allocation (Empirical Study on Provincial Government in Indonesia). ARTICLE.
- Sugiyanta. 2016, June. Analysis of capital spending and the factors affecting it on district / city governments in Indonesia. *Journal of Accounting, University of Jember*, 14 No.1.
- Susanti, S., & Fahlevi, H. 2016. The Effect of Local Revenue, General Allocation Funds, and Profit Sharing Funds on Capital Expenditures (Studies in Districts / Cities in Aceh Region). *Accounting Economics Student Scientific Journal (JIMEKA)*.
- Suwanda, D., Junjuran, BA, Affandi, A., & Rusliati, E. 2019. Risk Management (Regional Financial Management in Efforts to Increase Transparency and Public Accountability. (YP Santoso, & NN Muliawati, Eds.) Bandung: PT Remaja Rosdakarya.
- Shukri, Muhammad; Hinaya. 2019, September. The Effect of Economic Growth, Local Own Revenue, General Allocation Funds and Special Allocation Funds on the Capital Expenditure Budget of Regency & City of South Sulawesi Province. *Jemma | Journal Of Economic, Management And Accounting*, 2, 30-37.
- Law Number 33 Year 2004. 2004, October 15. Law (UU) on Financial Balance between Central Government and Regional Government. Financial Balance between Central Government and Regional Government. Retrieved from <https://peraturan.bpk.go.id/>
- Wandira, AG 2013. The Effect of PAD, DAU, DAK, and DBH on the Allocation of Capital Expenditures. *Accounting Analysis Journal*.
- Yusuf, MH 2017, July 18. Analysis of the factors that influence the realization of local government capital expenditures (Studies on districts / cities in East Java province). Thesis.